

WHAT IS CLAIMED IS:

1. A method for detecting a change in the viscosity of a fluid sample, said method comprising:
- 5 (a) introducing a sample into an electrochemical cell comprising oppositely spaced apart working and reference electrodes;
- (b) applying an electric potential to said reaction cell to produce a steady state current between said oppositely spaced apart electrodes;
- (c) detecting a change in said steady state current; and
- 10 (d) relating said change in steady state current to a change in viscosity of said fluid sample.
2. The method according to Claim 1, wherein said change in steady state current is a decrease in steady state current.
- 15 3. The method according to Claim 1, wherein said change in viscosity is an increase.
4. The method according to Claim 1, wherein said fluid sample is a physiological sample.
- 20 5. The method according to Claim 4, wherein said physiological sample is blood.
6. The method according to Claim 5, wherein said method further comprises relating said change in viscosity to the prothrombin time (PT) of said blood.
- 25 7. The method according to claim 1, wherein said electrochemical cell comprises a redox couple.
8. A method for detecting the onset of coagulation of a blood sample, said method comprising:
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- (a) introducing said blood sample into an electrochemical cell comprising:  
    (i) oppositely spaced apart working and reference electrodes; and  
    (ii) a reagent mixture comprising a redox couple;
- (b) applying an electric potential to said reaction cell to produce a steady state  
5 current between said oppositely spaced apart electrodes;
- (c) detecting a change in said steady state current; and
- (d) relating said change in steady state current to the onset of coagulation in  
said blood sample.
9. The method according to Claim 8, wherein said change is a decrease.
10. The method according to Claim 8, wherein said reagent comprises a coagulation  
catalyzing agent.
11. The method according to Claim 10, wherein said coagulation catalyzing agent  
15 comprises thromboplastin.
12. The method according to Claim 10, wherein said method further comprises  
relating said onset of coagulation to the prothrombin time of said blood sample.
- 20 13. An electrochemical test strip comprising:  
an electrochemical cell comprising:
- (a) oppositely spaced apart working and reference electrodes; and
- (b) a reagent mixture comprising:
- (i) a redox couple; and  
25 (ii) a coagulation catalyzing agent.
14. The reagent test strip according to Claim 13, wherein said oppositely spaced  
working and reference electrodes are separated by a distance ranging from about 50 to  
750  $\mu\text{m}$ .

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15. The reagent test strip according to Claim 14, wherein said coagulation catalyzing agent comprises thromboplastin.

16. The reagent test strip according to Claim 13, wherein said redox couple comprises a ferricyanide and ferrocyanide.

17. The reagent test strip according to Claim 13, wherein said electrochemical cell has a volume ranging from about 0.1 to 10  $\mu$ L.

18. A meter for detecting a change in viscosity of a fluid sample, said meter comprising:

(a) means for applying an electric potential to an electrochemical cell made up of oppositely spaced apart working and reference electrodes and comprising said fluid sample;

(b) means for measuring cell current between said oppositely spaced apart working and reference electrodes;

(c) means for detecting a change in said measured cell current; and

(d) means for relating said change in measured cell current to a change in viscosity of said fluid sample.

19. The meter according to Claim 18, wherein said meter further comprises a means for relating said change in viscosity to the prothrombin time of said fluid sample.

20. A kit for use in detecting a coagulation event in a blood sample, said kit comprising:

(a) at least one electrochemical test strip comprising an electrochemical cell comprising:

(i) oppositely spaced apart working and reference electrodes; and

(ii) a reagent mixture comprising a redox couple and a coagulation catalyzing agent; and

(b) at least one of a calibration means and a means for obtaining a sample.

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